**In the Claims**:

Claims 1-12 (Cancelled).

13. (New) A method for monitoring on a reverse link idling mode connections between a base station and a plurality of idling subscriber units that are powered on, but not actively sending data, the method comprising:

making available a plurality of orthogonal subchannels within at least one Code Division Multiple Access (CDMA) radio frequency (RF) channel;

assigning a shared orthogonal subchannel to at least two different idling subscriber units, but utilizing different time slots of the shared orthogonal subchannels;

for each idling subscriber unit assigned the shared orthogonal subchannel, sending a respective heartbeat signal within its assigned time slot at a data rate that is low enough to maintain bit synchronization with the base station; and

tracking the respective heartbeat signals within the assigned time slots by

selecting an assigned time slot within the shared orthogonal subchannel,

retrieving a previous tracking of a respective heartbeat signal for an idling subscriber unit associated with the assigned time slot,

determining a current tracking of the respective heartbeat signal for the idling subscriber unit associated with the assigned time slot,

updating the tracking of the idling subscriber unit associated with the assigned time

slot based upon its current and previous trackings,

storing the updated tracking for the idling subscriber unit associated with the assigned time slot, and

selecting a next assigned time slot within the shared orthogonal subchannel, and repeating the retrieving, determining, updating and storing for a different idling subscriber unit associated with the next selected assigned time slot.

14. (New) A method according to Claim 13 wherein for a first time tracking of the respective heartbeat signals within the assigned time slots, the previous tracking is a default tracking.

15. (New) A method according to Claim 13 wherein the base station assigns the shared orthogonal subchannel.

16. (New) A method according to Claim 13 wherein the different time slots of the shared orthogonal subchannel are uniquely assigned.

17. (New) A method according to Claim 16 wherein each idling subscriber unit sends the heartbeat signal in its uniquely assigned time slot.

18. (New) A method according to Claim 16 wherein an idling subscriber unit enters an active mode by sending a command signal to the base station using its uniquely assigned time slot to request allocation of additional available orthogonal subchannels.

19. (New) A method according to Claim 13 wherein the base station sends feedback to each idling subscriber unit relating to an adjustment of its transmit timing.

20. (New) A method according to Claim 13 wherein the base station sends feedback to each idling subscriber unit relating to an adjustment of its transmit power.

21. (New) A method according to Claim 13 wherein the base station comprises a code-correlator for tracking the respective heartbeat signals within the assigned time slots of the shared orthogonal subchannel.

22. (New) A method according to Claim 13 wherein the base station comprises an early-late correlator for tracking the respective heartbeat signals within the assigned time slots of the shared orthogonal subchannel.

23. (New) A method for monitoring idling mode connections between a base station and a plurality of idling subscriber units that are powered on, but not actively sending data, the method comprising:

making available a plurality of orthogonal subchannels within at least one Code Division Multiple Access (CDMA) radio frequency (RF) channel;

assigning a shared orthogonal subchannel to at least two different idling subscriber units, but utilizing different time slots of the shared orthogonal subchannels;

for each idling subscriber unit assigned the shared orthogonal subchannel, sending a respective heartbeat signal

within its assigned time slot at a data rate that is low enough to maintain bit synchronization with the base station; and

tracking the respective heartbeat signals within the assigned time slots by

selecting an assigned time slot within the shared orthogonal subchannel,

retrieving a previous tracking of a respective heartbeat signal for an idling subscriber unit associated with the assigned time slot,

determining a current tracking of the respective heartbeat signal for the idling subscriber unit associated with the assigned time slot, and

updating the tracking of the idling subscriber unit associated with the assigned time slot based upon its current and previous trackings.

24. (New) A method according to Claim 23 wherein tracking the respective heartbeat signals further comprises storing the updated tracking for the idling subscriber unit associated with the assigned time slot.

25. (New) A method according to Claim 24 wherein tracking the respective heartbeat signals further comprises selecting a next assigned time slot within the shared orthogonal subchannel, and repeating the retrieving, determining, updating and storing for a different idling subscriber unit associated with the next selected assigned time slot.

26. (New) A method according to Claim 23 wherein for a first time tracking of the respective heartbeat signals within the assigned time slots, the previous tracking is a default tracking.

27. (New) A method according to Claim 23 wherein the base station assigns the shared orthogonal subchannel.

28. (New) A method according to Claim 23 wherein the different time slots of the shared orthogonal subchannel are uniquely assigned.

29. (New) A method according to Claim 28 wherein each idling subscriber unit sends the heartbeat signal in its uniquely assigned time slot.

30. (New) A method according to Claim 28 wherein an idling subscriber unit enters an active mode by sending a command signal to the base station using its uniquely assigned time slot to request allocation of additional available orthogonal subchannels.

31. (New) A method according to Claim 23 wherein the base station sends feedback to each idling subscriber unit relating to an adjustment of its transmit timing.

32. (New) A method according to Claim 23 wherein the base station sends feedback to each idling subscriber unit relating to an adjustment of its transmit power.

33. (New) A method according to Claim 23 wherein

the base station comprises a code-correlator for tracking the respective heartbeat signals within the assigned time slots of the shared orthogonal subchannel.

34. (New) A method according to Claim 23 wherein the base station comprises an early-late correlator for tracking the respective heartbeat signals within the assigned time slots of the shared orthogonal subchannel.

35. (New) A base station comprising:

a plurality of Code Division Multiple Access (CDMA) transceivers; and

a bandwidth management circuit connected to said plurality of CDMA transceivers for monitoring idling mode connections with a plurality of idling subscriber units that are powered on, but not actively sending data, said bandwidth management circuit

making available a plurality of orthogonal subchannels within at least one CDMA radio frequency (RF) channel,

assigning a shared orthogonal subchannel to at least two different idling subscriber units, but utilizing different time slots of the shared orthogonal subchannel,

receiving from each idling subscriber unit assigned the shared orthogonal subchannel, a respective heartbeat signal within its assigned time slot at a data rate that is low enough to maintain bit synchronization with the base station, and

tracking the respective heartbeat signals within the assigned time slots by

selecting an assigned time slot within the shared orthogonal subchannel,

retrieving a previous tracking of a respective heartbeat signal for an idling subscriber unit associated with the assigned time slot,

determining a current tracking of the respective heartbeat signal for the idling subscriber unit associated with the assigned time slot, and

updating the tracking of the idling subscriber unit associated with the assigned time slot based upon its current and previous trackings.

36. (New) A base station according to Claim 35 wherein tracking the respective heartbeat signals by said bandwidth management circuit further comprises storing the updated tracking for the idling subscriber unit associated with the assigned time slot.

37. (New) A base station according to Claim 36 wherein tracking the respective heartbeat signals by said bandwidth management circuit further comprises selecting a next assigned time slot within the shared orthogonal subchannel, and repeating the retrieving, determining, updating and storing for a different idling subscriber unit associated with the next selected assigned time slot.

38. (New) A base station according to Claim 35 wherein for a first time tracking of the respective heartbeat

signals within the assigned time slots by said bandwidth management circuit, the previous tracking is a default tracking.

39. (New) A base station according to Claim 35 wherein the different time slots of the shared orthogonal subchannel are uniquely assigned.

40. (New) A base station according to Claim 39 wherein each idling subscriber unit sends the heartbeat signal in its uniquely assigned time slot.

41. (New) A base station according to Claim 35 wherein one of said plurality of CDMA transceivers sends feedback to each idling subscriber unit relating to an adjustment of its transmit timing.

42. (New) A base station according to Claim 35 wherein one of said plurality of CDMA transceivers sends feedback to each idling subscriber unit relating to an adjustment of its transmit power.

43. (New) A base station according to Claim 35 wherein said bandwidth management circuit comprises a code-correlator for tracking the respective heartbeat signals within the assigned time slots of the shared orthogonal subchannel.

44. (New) A base station according to Claim 35 wherein said bandwidth management circuit comprises an early-late correlator for tracking the respective heartbeat signals

within the assigned time slots of the shared orthogonal subchannel.